


Jagoteq
LF-40 USER MANUAL






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Thank you for choosing the **Jagoteq LF40**. Please review all materials before you begin.


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SAFETY PRECAUTIONS

The LF40 is to be used only by trained personnel.

 Warning	<p>Jagoteq products are an ecosystem with very specific parts and components, which include: lasers, optics, a variety of side emitting and transfer fibers, utility tools, and safety components. <u>It is vital to use only the products supplied or specified by Jagoteq to insure safe use.</u></p>
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LASER SAFETY

 Warning	<p><u>Direct eye contact with the output beam from the laser will cause serious damage and possibly blindness.</u></p>
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OPTICAL SAFETY


All possible safety precautions have been taken to ensure the users protection from injury during use.


The **Jagoteq LF40** is a laser device, special care and considerations must be made to ensure the safety of the user and all personnel in close proximity to the device. Every precaution has been done to ensure your safety. The 3R safety certification is in addition to the ETL safety certification as it applies to the laser(s).

Safety training can be done in person or by completing our brief on-line guide. Once you have completed the training your name will be registered with Jagoteq. Our field tech will act as the LSO (laser safety officer) for any questions in relation to use of the **Jagoteq LF40** and implementing safety measures.

The 3R classification was attained by adding multiple proprietary safety equipment built-into the units. The 3R classification allows for the public to work in the vicinity of the lasers without restriction.


Because of its unique properties laser light can pose certain safety hazards. **Safe use is required by the operators at all times.** Always follow laser safety policies as laid out in this user manual and presented by Jagoteq personnel.

 <p>Warning</p>	<p><i>Never attempt to bypass any safety devices on the Jagoteq LF-40. Such actions can result in eye damage, burns to skin, clothing or paint and can ignite volatile substances.</i></p>
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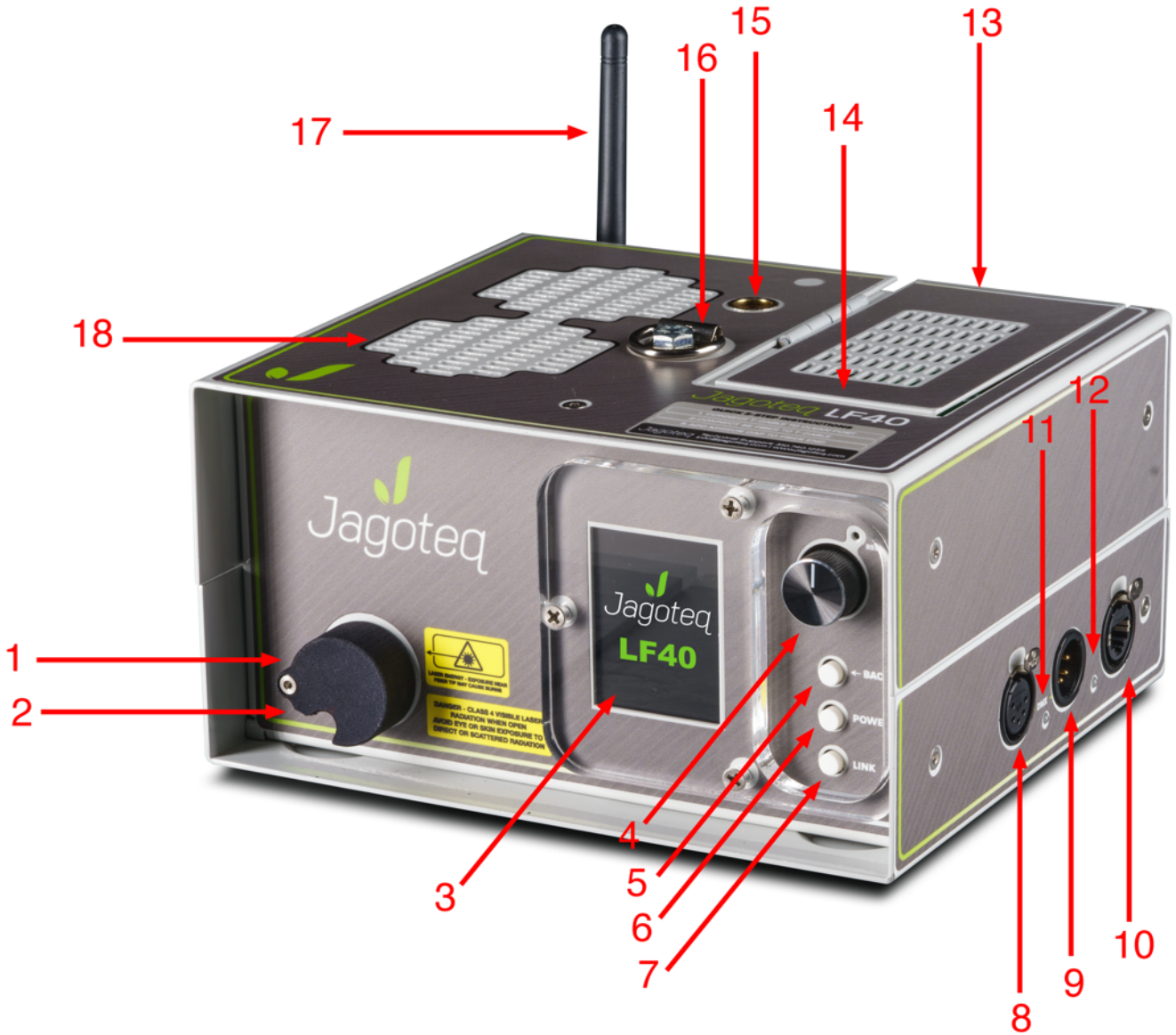
 Warning	<p><u>Please follow these Safety Guidelines:</u></p> <ul style="list-style-type: none">• Do not power up the LF-40 until all components are attached and secured.• Observe all safety precautions in the user's guide.• Limit access to the laser to qualified users who have been trained in laser safety practices.• Never look directly into the laser light source. Never stare down the beam into the point of the source.• Advise team members of the use of the laser device.• Only Finger tighten connections between fibers and devices
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OPERATIONAL SAFETY

The **Jagoteq LF-40** conforms to all governmental regulations but use of the laser in a way other than specified is not recommended, can cause serious bodily or property damage and will void the warranty.

 Warning	<p><u>If it is suspected that the laser system is missing safety regulated parts, has been damaged, or may otherwise be unsafe - turn the laser off and disconnect the input power immediately.</u></p> <p>Do not operate the laser until all potential safety hazards have been eliminated. Do not attempt to use any tool to remove covers to investigate or repair the equipment unless specifically trained to service this equipment.</p>
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No.	Label/Name	Description
1	IR Safety Door	Swing door in upward direction to insert Transfer Fiber
2	Laser Port/Output	Transfer fiber SMA connector
3	LCD Panel	Panel for critical data and functions
4	Rotary Selector	Rotate to scroll to menu item, press to select.
5	Back Button	Back Button-Press to go to previous screen
6	Power Button	Press 1 second to turn power on Press and hold for 3 seconds to turn off.
7	Wireless Link Button	Press to link/pair wireless DMX apps
8	DMX Out	5 pin female XLR connector
9	DMX In	5 pin male XLR connector
10	Cat5 Ethernet	Ethercon Data Port supports ArtNet and sACN
11	DMX Indicator Light	Indicates DMX signal: <ul style="list-style-type: none"> • red-no signal • green-signal active
12	DMX Indicator Light	Indicates DMX signal, red-no signal, green-signal active
13	Battery/ AC/DC Compartment	Compartment to house battery , AC/DC converter power source, antenna or other components.
14	USB-A	Firmware updates (not a charging port)
15	3/8 -16 Receiver	Mounting connection point
16	D-ring	Mounting connection point
17	CRMX Antenna	Removable antenna for wireless DMX
18	Vent	Provides airflow for heat sink, Do Not Block



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DEFINITIONS AND DETAILS:

POWER: The **LF40** works on 120V A.C., 60Hz power. Power is turned on by pressing the power button labeled i/o. To turn off the unit press the same button and hold for 3 seconds. Power consumption when using the unit in full power is 5 amps.

Battery: The LF40 utilizes a NiMH Rechargeable Battery: 12V 2200mAh (26.4Wh,2x5S/S,MH-AA2200B)

Battery	<ul style="list-style-type: none"> • Custom 12V, 2200mAh battery pack is made of 10pcs AA size 2200mAh NiMH cells assembled by (2x5) configuration • Wrapped in thin plastic PVC
Voltage	12V (working) 14.5V (peak)
Capacity	2200mAh or 26.4wh
Charging Rate	Standard 0.5A Max. 1.0A
Discharging Rate	Standard rate:2A
Terminal	<p>Terminal Options</p> <ul style="list-style-type: none"> • CU-J445: 6" 18 AWG wire with 5.5x2.1 Male Barrel Connector • CU-J445-V2 18"18AWG wire with 5.5x2.1 Male Barrel Connector • CU-J445-V3 18"18AWG wire with 5.5x2.1 Male Barrel Connector <p>Center Pin is positive One 4.0Z polyswitch installed in pack to protect short</p>
Dimension	72mmx29mmx54mm
Net Weight	280g (10oz)
Options	For fast charging, please choose 12V smart NiMH battery pack charger to recharge the battery pack. Note: charger's connector is not the same as this pack. The charging time is about 2.5 hrs. Please set current level to 0.9A
Cautions	<ul style="list-style-type: none"> • Please don't discharge battery below 10V (1.0V/cell) Deep discharging may damage NiMH battery pack. • Charge battery immediately every time it is discharged. Never store battery pack below 10V.

Safety Instructions and Warnings for NiMH Batteries

Never make wrong polarity connection when charging and discharging battery pack. Always double check polarity of battery's connection to make sure red wire to red wire and black wire to black wire.

Do not mix and use old batteries and new batteries or batteries with different brand names.



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Always use a smart charger with automatic power cut-off function to charge NiMH battery which reduces possible accidental catastrophic battery malfunction.

When charging put the battery in a fire-proof place to avoid any accidental catastrophic malfunction.

Charge NiMH batteries and packs at least every six months for healthy battery life.

Charge NiMH battery before initial use, allow 3-5 cycles of charging and discharging for maximum battery capacity.

Disposal

Removable batteries: Bring to specialized battery recyclers, participating retailers or local household hazardous waste collection programs.

Handling precautions: Place each battery in a separate plastic bag or place non-conductive tape over the battery's terminals. Handle any damaged battery with care and appropriate personal protective equipment.

EPA Recommendations: Look for labels identifying battery chemistry. **Do Not put rechargeable batteries in the trash or municipal recycling bins. Find a recycling location near you that accepts battery disposal.**

The battery compartment access door on the top of the unit opens to provide a connection point for the 120V A.C. 60Hz power brick or for utilizing a battery for portability. The compartment also serves as storage for the antenna when not in use.



TRANSFER FIBER: There are two types of fiber optic cable that work with the Jagoteq **LF-40**. The first is the Transfer Fiber. The Transfer Fiber must be securely connected to the laser port, it emits no light as it is a shielded cable. Transfer cable is steel clad and strong but should be treated with care. **Do not bend more than a 200mm radius as damage to the fiber can occur.** Keep the end of the Transfer Fiber covered when not in use and always wipe with a clean lens cloth before inserting into the **LF-40** laser port.


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The Transfer Fiber ends should be kept dry at all times. Submerging or condensation can result in damage to the fiber and the unit.

Only Finger tighten the collar of the SMA-905 connection, do not over tighten.

SIDE EMITTING FIBER: The light emitting fiber, or Side Emitting Fiber (SE Fiber), is a specially engineered plastic that is highly reusable and may be recycled (plastic I.D. # 7). *The SE fiber transfers no heat or electricity and therefore can be used in wet conditions without fear of electrical shock.*

The SE Fiber is flexible, with the 12mm fiber able to bend to a 6” radius, the 8mm fiber able to bend to a 3.5” radius and the 6mm fiber bending to a 2.5” radius. The number of bends in the light SE fiber will contribute to the loss of light output over distance as well if the SE Fiber is bent at a radius smaller than the recommended bend radius limits.

If the SE Fiber is bent at a radius exceeding the intended use the SE Fiber will lose some light output. Any bright spot in the fiber optic cable represents a point at which the fiber optic cable has been bent beyond its approved bend radius. *A compromised SE Fiber cable should be cut to eliminate the hot spot or be replaced.*

When using 1 **LF-40** Emitter always use an End Cap regardless of length of SE Fiber. The SE Fiber is cool to the touch but the light being emitted from the end of the fiber is still a focused beam and can burn skin or objects so the **End Cap is required at all times when using one emitter.**




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SIDE EMITTING FIBER (SE FIBER)

The light emitting fiber optic cable may be cut to any length down to 12” when using a single **LF-40** controller. **Always reapply the end mirror cap after cutting the SE Fiber.**

NOTE: The 1mm glass fiber requires a special end cap and tool to cut to length. Refer to Cutting and Polishing guide.

CONNECTORS: Jagoteq offers various connectors, straight, 45 degree, 90 degree and ‘T.’ The family of connectors will help you make tight turns and shape the SE Fiber to meet your specific needs

SECURING FIBER OPTIC CABLE: When attaching the SE Fiber to any surface we recommend using a cable tie that does not pinch the SE Fiber. We do not recommend staples designed to work with cable as it is very hard to control the amount of pressure the staple may exert on the cable. **Pictured below is examples of an approved cable clamp style.**

The cable clamps are readily available in 13mm which is recommended for the 12mm SE Fiber and the 10mm cable clamp is recommended for the 8mm SE Fiber.




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The 1mm fiber may be attached with a 1/8” diameter cable clamp or 1mm track.

In certain situations, you may want to use museum wax to attach the SE fiber to sensitive surfaces where using screws or nails are not permitted.

Creating a straight linear pattern with the fiber can be achieved with a clear track that can be secured via screw, 3M removable strips, construction adhesive, silicone adhesive or double stick tape. 4’ segments available.



Blacking out areas of the fiber can be achieved by using commonly found Wire Heat Shrink Tubing. If using a heat gun or any heat emitting device to shrink the wrap be careful not to damage fiber optic jacket.



If you’re applying the 1mm fiber to the skin of the actor, you may try spirit gum provided you have made sure that the spirit gum does not irritate the actor’s skin. In certain situations, painter’s tape may be sufficient to hold the 1mm SE fiber in place.




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SET-UP AND OPERATION

Please follow these steps to ensure safe and reliable use of your Jagoteq LF40:

 <p>Warning</p>	<p><u>Do not power up the LF-120 until all components are attached and secured.</u></p>
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The Jagoteq LF40 requires the following parts to operate:

1. Jagoteq LF40 light emitting unit
2. SMA-905 (in) Transfer Fiber (can vary in lengths) to Side Emitting Connection (can vary in diameter)
3. Fiberlink Adaptor
4. Side Emitting Fiber (vary in length and diameter)
5. Protective Caps
6. End Caps
7. Side Emitting fiber that currently work with the LF-40 are as follows:
 - a. 1mm Glass Fiber
 - b. 3mm PMMA
 - c. 6mm PMMA
 - d. 8mm PMMA
 - e. 12mm PMMA
 - f. A variety of Multistrand fiber above 6mm ID


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Connections:

1. The Jagoteq LF40 uses several types of fiber optics for operation. It is very important to keep all ports covered when not in use. It is equally important to keep the ends of the Transfer Fiber covered when not in use.

2.

 <p>Warning</p>	<p><u>Do not discard any caps or covers.</u></p> <p><u>Never attempt to alter the Transfer Fiber this will cause hazardous conditions.</u></p>
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1. Do not touch the ends of the Transfer fiber with fingers. Wipe the end of the Transfer Fiber with 99.9% IPA Wipe or a lens cleaning cloth before connection to LF40.




3. Make sure the fiber optic cable port is clean, a dirty port will cause loss of light and may result in a build-up of heat that damages the fiber optic cable.
4. Do Not insert any foreign objects into the laser port on the LF40.
5. Raise the IR Safety Door in an upward motion to expose the laser port. Unscrew the laser port dust cap.
6. There is a white collar on the end of the Transfer fiber that should be inserted into the laser port.
7. The Transfer Fiber should be initially tilted when inserted into the fiber port of the LF40 to minimize the possibility of damage to the end of fiber


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-  8. Care should be taken not to bend the Transfer Fiber less than a bend radius of 200mm to prevent breakage.
-  9. Securely Finger tighten the collar of the SMA-905 connection to the LF40, do not over tighten.
-  10. Allow the IR Safety Door to swing downward and cover the Transfer Fiber. This will allow the power to be initiated once all components are attached.



 Warning	<p><u>Never attempt to override the IR Safety Door, this can be dangerous to skin, eyes and property.</u></p>
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- 11. Attach the end of the transfer fiber (follow same cleaning and connecting as above) to the Fiberlink .


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12. Insert the Side Emitting Fiber (SE) into the Fiberlink making sure that the SE fiber is inserted until it stops at the internal ridge.
13. Finger tighten the cable gland to ensure the SE fiber does not pull out of the Fiberlink.



14. The receptor at the end of the Transfer Fiber is a safety connection for attaching the Side Emitting Fiber.
15. Side Emitting Fiber can be cut to any length 12" and above using the Jagoteq Cable Cutter.
16. Cuts in any of the fibers should be a strict right angle cut for optimum light transfer and safety.
17. Turn off power and disconnect Side Emitting Fiber before cutting.


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The Side Emitting Fiber should never be cut shorter than 12". Using lengths shorter than 12" is an extreme danger to users and property.

When using a single LF-40 Emitter make sure to connect Mirror End Cap onto the far end of the Side Emitting Fiber. This is a protective feature as well as a use of reflected light back into the fiber. Never use the Side Emitting Fiber without the Mirror End Cap provided.

18. Keep the Jagoteq LF40 controller away from water and dust. The Jagoteq LF40 is not rated for use around wet conditions.
19. Always test the unit in the environment and the same network and 3rd party products that will be used with Jagoteq products during filming, video capture or live event.
20. Always keep the Transfer fiber ends and the SE fiber ends clean before use and store properly to ensure proper transmission of light and reduce risk of damage to the fibers.



The Side Emitting Fiber is entirely waterproof and does not emit heat or electricity. Please do not however submerge the end of the Transfer Fiber. This will cause damage to the Transfer Fiber and the Side Emitting Fiber.

USER INTERFACE

The **LF40** has a highly intuitive user (UI) interface making using your **LF40** simple.

Power Button: Press the power button and release to turn on the **LF40**. To turn off the unit press and hold the power button for at least 3 seconds.



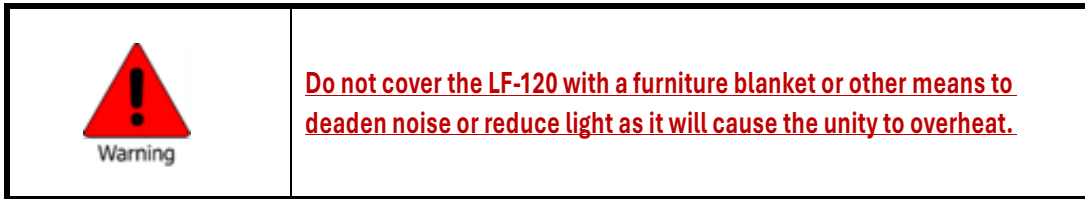
ROTARY KNOB AND BACK BUTTON: The Rotary Knob or ‘jog wheel’ allows you to scroll through the menus back and forward. To accept the highlighted selection simply press the Rotary Knob. The button directly below the Rotary Knob is the Back Button which as its name suggests sends you back to the previously selected menu item when pressed. When pressed two times consecutively the Back Button will take you back to the home screen.



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FAN: While the **LF40** is engineered to be quiet you can lower the fan speed to reduce the noise level even more. Fan speed options are: 1.) default, fans at full power 2.) 50% speed reducing the fan noise by approximately 50%.

NOTE: When the LF40 reaches critical internal temperature the fans will automatically go to default setting.



NOISE LEVEL: The LF40 is designed to work in spaces where noise level is critical, such as during filming. The fan speed button takes you to settings which can lower the fan noise level.

DISPLAY: In sensitive light situations you may need to lower the amount of light from the LF40's display screen and LEDs. The display button allows you to choose between four light levels;

- 1.) default or 100%
- 2.) 50%
- 3.) 25%
- 4.) all lights off.

Note: When in lights off mode pressing any button will bring the unit back up to default mode with lights at full brightness.

DMX and Ethernet control: Your LF40 comes standard with 5 pin XLR male and female connectors for standard 512 channel DMX control.

The Ethernet connection is a standard Cat6 connection and allows for the transmission of multiple DMX universes using protocols such as Artnet and sACN.

Wireless DMX can be utilized via the UI and by attaching the provided CRMX antenna to the connection point located at the back of the unit. When not in use you can store the antenna in the battery compartment.


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FIRMWARE: Firmware updates may be done using the USB-A connection on the front face of the LF40. There is no phone or personal device charging through the USB-A port.

CONFIGURATION AND MODE BUTTON FEATURES

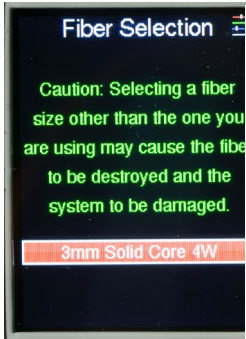
All selections are done with the “Rotary Knob” on the front panel. Scroll down to *Selection* and press Rotary Knob inwards to confirm selection. Press the “Back” located below the “Rotary Knob” anytime to go back in the menu.



The splash screen on the UI displays Jagoteq Model and Firmware Version



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The Fiber Selection screen is displayed automatically after the splash screen. You need to select the type of fiber being connected to the **LF40**. This adjusts the amount of laser energy being projected into the fiber.

Do not try to override or designate a fiber other than the fiber being used.

Selecting the improper fiber could result in melting down the end of the fiber and damage to the optics.

Scroll to the correct fiber selection and depress the rotary button to confirm.



The Main Data screen displays a quick look at user data for the operation of the unit. Use the *Rotary Knob* to scroll to the selection and press to move to the next menu.



DMX/Network: Use Rotary Knob to scroll to selection and press to change, confirm and move to next selection.

Device IP and SubNet Mask can be changed to match application designated data.

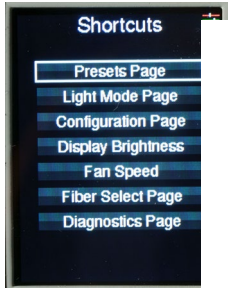
DMX Protocol: sACN or Artnet

Universe: Select and designate to match application designated data.

DMX Start Channel: Make note to enter into application designated data. Laser Engine utilizes 4 channels Red, Green, Blue and Intensity.



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Pressing the Back Button twice will bring you to the Shortcuts menu. Scroll down to selection and press Rotary Knob to confirm.



Presets page allows the selection of a saved Preset from past sessions. Scroll down to selection and press Rotary Knob to confirm.



Selecting a Preset takes you to the Options Menu. To use current Preset as-is, press *Rotary Knob* to confirm “Use this Preset.”

To edit current values, press *Rotary Knob*, which will take you to RGBI mode to make modifications to the Preset. Make sure to save Preset once modifications are made.

To edit Name, select and press *Rotary Knob* to name and save modifications.

Finally, select Delete Preset by pressing *Rotary Knob* to confirm.



Light Mode allows you to select various styles of color options.

- RGBI allows for individual changes to each color and intensity.
- CCT allows for selection of standard Kelvin designations.
- HSI allows for modifications to Hue, Saturation, and Intensity.
- Effects take you to preloaded local FX that can also be adjusted to user preferences.
- Presets takes you back to Preset Menu.



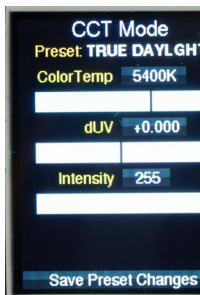
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RGBI Mode allows adjustment of individual colors.

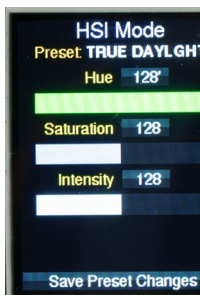
Scroll down to color or intensity and press *Rotary Knob*, turn *Rotary Knob* to required value, and press to confirm.

To save values, scroll to bottom and select Save Preset Changes and press *Rotary Knob* to confirm. This will take you to the Presets Menu to name your Preset.



CCT Mode allows for the selection of a Color Temp/Kelvin or a dUV. Select either of these 2 selections and press the *Rotary Knob* to adjust. Press again for confirmation.

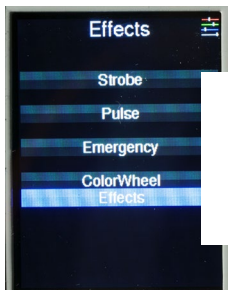
Scroll to Intensity and adjust the overall light output and press *Rotary Knob* to confirm.



Scroll down to Hue, press the *Rotary Knob* to make adjustments to the Hue. The color bar shows approximate color being selected. Press *Rotary Knob* to confirm and move to next selection.

To adjust Saturation, scroll down and press *Rotary Knob* to select and adjust saturation to desired value and press *Rotary Knob* to confirm.

Scroll to Intensity, press *Rotary Knob* to select and adjust the amount of light output. Press *Rotary Knob* to confirm.

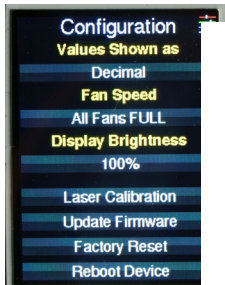


The local Effects can be accessed by scrolling to selection and pressing the *Rotary Knob*. This will bring you to an options Menu for the selected Effect.

Press the *Rotary Knob* to confirm or Save Presets to save the adjusted options.



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Configuration allows for adjustment of user preferences or operational functions of hardware. Scroll to selection and press *Rotary Knob* to make adjustments. For pop-up menus, scroll to Cancel or Confirm and press *Rotary Knob* to select or confirm.

VALUES: Changes from Decimal to Percentage of output range.

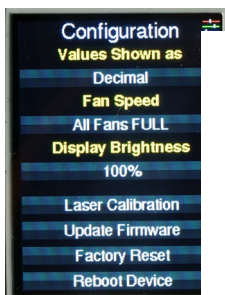
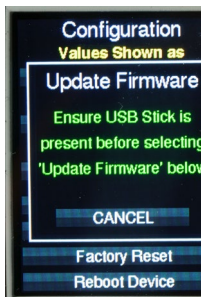
FAN SPEED: Default fan speed is set to a sound recording safe sound range. Higher fan speeds are suggested for high heat environments. Fans will automatically adjust either speed or output to protect integrity of laser diodes.

DISPLAY BRIGHTNESS: Adjustable based upon user requirements.

UPDATE FIRMARE: Select this when FW loaded USB-A is inserted into USB-A port. Please do not use the USB-A for charging.

FACTORY RESET: Select and confirm to reset all parameters to default.

REBOOT DEVICE: Select if there are any Firmware or Menu faults.




Please note that the Laser Calibration selection is locked and only accessible to a Certified Technician.



The Diagnostics menu is for reference only in order to monitor critical data.

Additional Reference:

FACTORY RESET: Factory reset puts the **LF40** in the same state it was when leaving the factory. To do a factory reset hold down the selector knob and back button together for about 10 seconds at which time a message on the screen will display a countdown to factory reset.

 Warning	<p><u>All saved data will be lost by doing a factory reset. We recommend doing a factory reset when you first receive your unit.</u></p>
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DEVICE REBOOT: Rebooting the device is achieved by simply disconnecting from power for at least 30 seconds. A device reboot will not wipe data or cause you to lose saved settings.

Laser Calibration: The **LF40** uses three lasers, a red, green, and blue laser work together to create any color you require. The lasers are calibrated to deliver the correct amount of power to each laser so that the color temperature you select appears accurately. If you believe the calibration is not set correctly contact our service department.

DMX NETWORK: Setting the IP address. The default IP address for the **LF40** is 192.168.1.201. If you are changing the IP address make sure you are addressing the needs of your entire network correctly.

DMX START ADDRESS: You can set the DMX start address locally through the UI or remotely via DMX and Ethernet protocols such as Artnet and sACN.

PRESETS: Your **LF40** comes with several presets to make getting to the most commonly used colors quickly, e.g. , 3200, 5600, etc.

You can also create and name and record your own presets through the UI by going to presets and following the menu instructions.



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CRI: Laser vs. LEDs. LED's color rendering index has become very critical in digital filming as the DOP works to represent skin tones as accurately as possible. Typical TV/movie lighting equipment often has CRI levels in the mid-90's. Light emitted from lasers cannot be measure in the same manner as LED lights. Generally, light emitted from the **LF40s** SE fiber is more color saturated and may have more green or magenta than LEDs with high CRI.

Jagoteq is designed to shine wherever LED ribbon is currently being used as an alternative. That said, you may choose to used your LF40 to light talent.

We recommend you test the LF40 with talent before filming.

Flicker Free: Light emitted from the LF40 is flicker free at any speed.

RIGGING POINTS: There are several ways you may rig your LF40. On the top of the unit is one 3/8" threaded female insert and one 'D' ring. You may use threaded rod and rigging tools with the 3/8" threaded female inserts and the 'D' ring for added safety.





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Technical Specs Jagoteq LF40 Controller

Data Control: 5 pin DMX control flow through without power

Ethernet: Allows for control via Artnet/sACN

Power input/output

IEC AC connection

Firmware updates: USB-A port

Fiber Connection:SMA-905

Fiber Optic cable Outputs: 1

Power consumption: 120V AC, 60Hz, 5A

UI: 1x3.1" color screen

Managed with rotary selector

Screens are dimmable

Cooling: Heat sink/Smart Fan Control

Ambient operating temperature: 34F-90F

Noise Level: 45dB at full operating power allow for use on film/TV sets

Quiet and Super Quiet Modes for limited time

Weight: 3.5lbs

Dimensions: 7.5"W x 4"H x 7"D

Material: Powder Coated Aluminum

Vinyl Wrap

Feet: Metal

Rigging points: 3/8"

female insert

"D" ring

SE Fiber Technical Specs

Side Emitting Fiber Cable:

Core Material: Polymetyl-Methacrylate Resin

Fiber: (Ømm) 3, and 6

Spool Length: 100 meters

Weight: 8mm 65g/m, 12mm 160g/m

Connector: SMA-905 and Jagoteq Fiberlink

Optical Performance:

Storage Temp: -5C to +60C

Operating Temp: -5C to +60C

Minimum Bend Radius: Ø8mm - 90mm, Ø12mm-150mm

Side Emitting Fiber Wire:

Core Material: Silica

Fiber: (Ømm) 950µm

Spool Length: 500 meters

Weight: 10g/m

Connector: SMA-905 and Jagoteq Safety Adapter

Optical Performance:

Storage Temp: -40C to 150C

Operating Temp: -40C to 150C

Minimum Bend Radius: 5mm

NO USER SERVICEABLE PARTS



The **LF-120** may only be opened by Jagoteq technicians in their shop. **Opening or tampering with the LF-120 will result in a fine of \$50,000.** The fine for opening or tampering with the unit is meant to discourage opening or tampering with the unit to protect not only the technician using the **LF-120** but anyone who is in near proximity of the **LF-120**. Lasers are safe when used as intended within our system with fiber optic cable and not in an open unit.



Jagoteq
LF-40 USER MANUAL

TECHNICAL SUPPORT

Contact your Jagoteq service by emailing Service@Jagoteq.com or calling 310-740-1255. We will support your needs through our website, phone conversations and in -person help when possible. Our first priority is to make sure your production is not negatively affected by down time and to that end we will supply a replacement unit if needed as quickly as possible depending on availability and logistics.

JAGOTEQ LIMITED WARRANTY

We warranty all workmanship and parts/materials to be free of defect and work as intended for the product's specific designed use for two years from the time of purchase. Accidents, deliberate breakage, or misuse of the product voids the warranty. We will repair or replace at our discretion parts or whole units to remedy issues we discover whether due to workmanship or functionality of the units provided the products were used for their intended purpose and in suitable condition for electronic products. In using a product with DMX and Ethernet controls you are likely to use this product in a system or network with other units that will affect the manner in which you are able to control the LF40; therefore the buyer accepts responsibility for understanding how to use this product in a shared network with DMX and Ethernet control (Artnet, sACN) with 3rd party products. Not having control over the environment that the LF40 will be used in and being aware of the dynamic nature of the entertainment industry we cannot warranty the finish, paint, or vinyl of the products.

Customer modified units will have their warranty voided and applicable fines will be applied. In the event that the warranty work is due to workmanship or materials on the part of Jagoteq all work related to the specific issue will be done at no cost. If the unit(s) must be shipped due to any fault of Jagoteq's shipping cost both directions will be paid for by Jagoteq provided the shipping is UPS or Fed-X ground 3 day. For faster shipping the customer may pay for expedited shipping. Jagoteq's liability will not exceed the value of the unit regardless of the issue. Jagoteq will not be held financially liable for any delays in media production that can be attributed to faulty Jagoteq equipment. Customer induced damage including but not limited to water, incorrect power voltage, etc., will cause this warranty to be void. When making a warranty claim we require the customer to provide a valid I.D. so we may reference the purchase in our system or proof of purchase. This warranty is non-transferable.